# **MAINTENANCE & LUBRICATION**

# **SECTION OI**

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#### RECOMMENDED LUBRICANTS

### **Engine**

In order to ensure the longevity and reliability of the vehicle, it is most important that **only the specified lubricants** are used. It is an entirely false economy to try to save money by using lower quality oils, which may break down before the next change interval and provide inadequate protection before the end of the term. High oil consumption may also result.

For topping up purposes during the running-in period prior to the First After Sales Service, a top quality mineral or semi-synthetic 5W/40 oil should be used. At the First After Sales Service and completion of the running-in period, a fully synthetic 5W/40 oil such as Texaco Havoline Synthetic should be used. This oil has been tested in all climatic conditions likely to be encountered, and offers advantages in ease of cranking, smooth cold running and fuel economy at low temperatures, in combination with good wear protection at elevated temperatures and at high engine speeds. If Texaco/Havoline products are not available, an oil meeting the following specification should be used. Note that Lotus does not recommend the use of any oil additives:

Viscosity: 5W/40

Quality Standard: API SJEC; ILSAC; ACEA A3

Capacity - refill inc. filter 4.4 litre (Cars fitted with front mounted oil coolers contain an additional 3.5

litres, but this oil is not drained during routine servicing)

Difference between high &

low dipstick marks 1.5 litre

Oil change interval Refer to Maintenance Schedule

# Transmission (gearbox & final drive)

Viscosity SAE 75W/90

Quality Standard API GL-4 or GL-5

Capacity 2.3 litre (2.4 US qt)

Oil change interval Refer to Maintenance Schedule

**Brake & Clutch System** 

Type Non-mineral (non-petroleum) hydraulic fluid

Specification DOT 4
Capacity - brake 1.5 litre
- clutch 0.5 litre
Fluid change interval 12 months

**Engine Coolant Additive** 

Only approved product Havoline XLC

Type Ethylene glycol antifreeze with OAT corrosion inhibitors

Colour Orange
Concentration 50%
Quantity reqd. @ 50% 6 litres
Coolant change interval 4 years

LSL460a

Job no.: Owner's name:	Vehicle:
Vehicle registration no.:	V.I.N.:
Recorded mileage:	Mileage at last service.:
Today's date:	Date of last service:

MAINTENANCE SCHEDULE - ELISE 111R & EXIGE 2004 M.Y. Onwards (Non-USA)

# **EXPLANATORY NOTES:**

# **Required Maintenance**

In order to maintain warranty validation and help ensure proper safety, emissions performance and dependability of the vehicle, Lotus Cars Ltd. requires that the vehicle be serviced in accordance with this schedule. Each service should be performed within 9,000 miles (15,000 km) or 12 months of the previous service, whichever first occurs. Any necessary repairs should be completed without delay.

A cross ( X ) in the following table indicates an operation to be performed. The corresponding box should be ticked when the operation has been satisfactorily performed, or the X circled if extra work and time is required. The approval of the customer should be obtained before any extra work is undertaken, details of which should be recorded in the space provided at the end of the schedule.

'Inspect' means assess condition and test for correct operation. Extra time is required to adjust or repair - advise customer beforehand if necessary.

'Check' means test and adjust/fill or tighten as necessary. Labour time is included.

# **Special Operating Conditions**

If the car is subjected to one of the following 'special operating conditions', additional servicing is required:

- Regular use on unpaved or dusty roads (1,2)
- Use in mountainous areas with severe or prolonged brake usage (3)
- Frequent short trips with cold engine (esp. in cold weather/climates); and/or frequent or prolonged idling (1)
- Occasional circuit use, with repeated high rpm, wide throttle openings and high oil temperatures (1,3,4)
- Competition, or timed track use (5)

#### Additional servicing:

- 1. Oil & filter change @ 4,500 m (7,500 km) intervals.
- 2. Inspect air cleaner @ 9,000 m (15,000 km) intervals, or as required.
- 3. Inspect brake pads & discs @ 4,500m (7,500 km) intervals, or as required.
- 4. Thorough safety check including wheels, tyres, suspension, steering and brake systems.
- 5. The Lotus Elise and Exige are designed as road going sports cars. It is recognised that owners may wish to use the car occassionally on closed circuit tracks to experience the car's full range of dynamic capabilities. However, use of the car in a competitive manner, including timed runs or laps, is not endorsed by Lotus. This type of timed, competitive use will invalidate warranty and require appropriate levels of expert vehicle preparation and servicing.

#### **After Sales Service**

To be performed within 1,000 - 1,500 miles (1,500 - 2,500 km) or 12 months of vehicle sale, whichever first occurs

There is no charge to the vehicle owner for the labour content of the After Sales Service. Only for materials used will a charge be made. To maintain warranty validation, an Engine History Report print out from the Lotus Scan tool must be submitted to the Warranty Department.



			Service Type	
Op. No.	Operation Description	After Sales	9,000m (15,000km) or 12 months	Other Intervals
1	Fit protective covers to seats, footwells, steering wheel and rear body	Х	Х	
	Lubrication			
2	Renew engine oil and filter - <i>normal conditions</i>	X	X	
2a	Renew engine oil and filter - special conditions		00m (7,500km)/	6 mth
3	Inspect engine & transmission for oil leaks	X	X	
4	Check transmission oil level		27,000m (45,000	
5	Renew transmission oil	54,	,000m (90,000kn	n)/6 yr
	Engine			
6	Inspect air cleaner element - special conditions		X	
7	Renew air cleaner element	2	27,000m (45,000	km)
8	Renew spark plugs	54,	,000m (90,000kn	n)/6 yr
9	Inspect auxiliary drive belt condition	1	X	
10	Inspect integrity of fuel system		Х	
11	Connect 'Lotus Scan', check for fault codes & programme level	Х	Х	
	Print 'Lotus Scan' Engine History Report and return to Lotus	Х	7	
	Cooling System			
500000000000000000000000000000000000000	Inspect water radiator & oil cooler hoses & pipework for damage		.,	
13	or leaks. Clean radiator & oil cooler finning		X	
14	Check coolant level	X	Х	
15	Renew coolant			4yrs
	Braking System	+	<u>.</u>	1,10
16	Inspect parking brake adjustment	<del>  x                                   </del>	X	
17	Inspect brake pad thickness & disc condition - <i>normal cndts</i> .	<del>  ^</del>	X	
17a	Inspect brake pad thickness & disc condition - special cndts.	-	4,500m (7,500k	m)
18	Inspect brake hoses, pipes & hydraulic units		X	T
19	Check brake fluid level	X	X	
20	Renew brake/clutch fluid	<del>                                     </del>		1 yr
20	Steering & Suspension	<u> </u>		l i yi
	Check security and condition of front & rear suspension inc. free	+		1
21	articulation of rear toe link ball joints		X	
22	Check torque of rear toe-link inboard fixing (50 Nm)	X		
23	Inspect dampers for leaks and performance	<del>  ^</del>	X	
24	Inspect dampers for leaks and performance Inspect front and rear wheel bearings for play	+	X	
25	Inspect from and real wheel bearings for play	+	X	
	Inspect condition of drive shart gallers Inspect steering ball joints and galters	+	X	
	Inspect steering bair joints and gaiters Inspect free play at steering wheel	+	<del>^</del>	
21	Wheels & Tyres	+	_ ^	L
28	Inspect tyre condition & set pressures	X	X	
20	Electrical	<del>  ^-</del>		L
20		<del>                                     </del>	X	<u> </u>
29	Check battery & terminals for security & condition	X	X	
30	Inspect operation of all lights	<del>  ^</del>	^	L
24	Body	<del> </del>	I v	1
31	Inspect adjustment of hinges and latches	X	X	
32	Inspect operation & condition of seat belts	+		
33	Lift footwell mats, clean & dry floor	+	X	
34	Inspect wiper operation & top up windscreen washer reservoir	X	Х	
35	Renew alarm transmitter batteries (check with customer)			1 yr



Road Test Performa	ance	
Engine performance		Tailpipe CO
Clutch operation		Gearbox operation
Brake performance		Steering performance
Driveline & suspensi	ion noise/vibration	Wheel balance
Canaral comments		
General comments		
Additional Work Pe	rformed or Required	
Moule appealated by	Our or's Maint	tananaa Daaklat atamaadi
work completed by .	Owner's Maint	tenance Booklet stamped:
Recommended Serv	vice Times	Dealer Stamp:
After Sales Service:	1.9 hr	
Regular Service:	2.8 hr	
Op. 2a:	0.6 hr	
Op.5:	0.7 hr	
Op.7:	0.6 hr	
Op.8:	0.5 hr	
Ор.6. Ор.15:	0.6 hr	Date:
•	0.6 m 0.3 hr	Date.
Op.17a:		
Op.20:	0.6 hr	
Op.35:	0.1 hr	

LSL462

**MAINTENANCE SCHEDULE - ELISE (North America)** 

Job no.: Owner's name:	Vehicle:
Vehicle registration no.:	V.I.N.:
Recorded mileage:	Mileage at last service.:
Today's date:	Date of last service:

# **EXPLANATORY NOTES:**

# **Required Maintenance**

In order to maintain warranty validation and help ensure proper safety, emissions performance and dependability of the vehicle, Lotus Cars Ltd. requires that the vehicle be serviced in accordance with this schedule. Each service should be performed within 7,500 miles or 6 months of the previous service, whichever first occurs. Any necessary repairs should be completed without delay.

A cross ( X ) in the following table indicates an operation to be performed. The corresponding box should be ticked when the operation has been satisfactorily performed, or the X circled if extra work and time is required. The approval of the customer should be obtained before any extra work is undertaken, details of which should be recorded in the space provided at the end of the schedule.

'Inspect' means assess condition and test for correct operation. Extra time is required to adjust or repair - advise customer beforehand if necessary.

'Check' means test and adjust/fill or tighten as necessary. Labour time is included.

# **Special Operating Conditions**

If the car is subjected to one of the following 'special operating conditions', additional servicing is required:

- Regular use on unpaved or dusty roads (1,2)
- Use in mountainous areas with severe or prolonged brake usage (3)
- Frequent short trips with cold engine (esp. in cold weather/climates); and/or frequent or prolonged idling (1)
- Occasional circuit use, with repeated high rpm, wide throttle openings and high oil temperatures (1,3,4)
- Competition, or timed track use (5)

#### Additional servicing:

- 1. Oil & filter change @ 4,500 m (7,500 km) intervals.
- 2. Inspect air cleaner @ 9,000 m (15,000 km) intervals, or as required.
- 3. Inspect brake pads & discs @ 4,500m (7,500 km) intervals, or as required.
- 4. Thorough safety check including wheels, tyres, suspension, steering and brake systems.
- 5. The Lotus Elise is designed as a road going sports car. It is recognised that owners may wish to use the car occassionally on closed circuit tracks to experience the car's full range of dynamic capabilities. However, use of the car in a competitive manner, including timed runs or laps, is not endorsed by Lotus. This type of timed, competitive use will invalidate warranty and require appropriate levels of expert vehicle preparation and servicing.

#### **After Sales Service**

To be performed within 1,000 - 1,500 miles or 12 months of vehicle sale, whichever first occurs.

To maintain warranty validation, an Engine History Report print out from the Lotus Scan tool must be submitted to the Warranty Department.



			Service Type	•
Op. No.	Operation Description	After Sales	7,500 miles or 6 months (soonest)	Other Intervals
. 7 1	Fit protective covers to seats, footwells, steering wheel and rear body	Х	Х	
	Lubrication			
100000000000000000000000000000000000000	Renew engine oil and filter - <i>normal conditions</i>	X	Х	
	Renew engine oil and filter - <i>special conditions</i>		,000 miles/6 mg	nths
	Inspect engine & transmission for oil leaks	X	X	
	Check transmission oil level		22,500 miles	
	Renew transmission oil		15,000 miles/6 y	
	Engine		<u>, , , , , , , , , , , , , , , , , , , </u>	
	Inspect air cleaner element - special conditions		Х	
	Renew air cleaner element		30,000 miles	<u> </u>
	Renew spark plugs	1 3	30,000 miles/6 y	
	Inspect auxiliary drive belt condition	<del>                                     </del>	X	
	Inspect integrity of fuel system	1	X	
	Print 'Lotus Scan' Engine History Report and return to Lotus	X		<del> </del>
	Cooling System	<del>  ^-</del>	<u> </u>	<u> </u>
	Inspect water radiator & oil cooler hoses & pipework for damage		l	1
177 1	or leaks. Clean radiator & oil cooler finning		X	
	Check coolant level	X	Х	-
		<del>  ^</del>		Aveno
	Renew coolant	<del>                                     </del>		4yrs
	Braking System	X	T v	1
	Inspect parking brake adjustment	<del>  ^</del>	X	<u> </u>
	Inspect brake pad thickness & disc condition - <i>normal cndts</i> .  Inspect brake pad thickness & disc condition - <i>special cndts</i> .	-	4,000 miles	
				T
	Inspect brake hoses, pipes & hydraulic units	- V	X	<u> </u>
	Check brake fluid level	X	^	4
	Renew brake/clutch fluid	1		1 yr
	Steering & Suspension			1
■ 2U I	Check security and condition of front & rear suspension inc. free articulation of rear toe link ball joints		Х	
21	Check torque of rear toe link inboard fixing (50 Nm)	Х		
22	Inspect dampers for leaks and performance		Х	
	Inspect front and rear wheel bearings for play		Х	
24	Inspect condition of drive shaft gaiters	1	Х	
25	Inspect steering ball joints and gaiters		Х	
	Inspect free play at steering wheel	1	Х	
	Wheels & Tyres			******
	Inspect tyre condition & set pressures	X	X	
	Electrical	1	•	
The state of the s	Check battery & terminals for security & condition	X	Х	
	Inspect operation of all lights	Х	Х	
	Body	1		•
CONTRACTOR OF THE PARTY OF THE	Inspect adjustment of hinges and latches	X	Х	
	Inspect operation & condition of seat belts	1	X	
	Lift footwell mats, clean & dry floor	<del>                                     </del>	X	
	Inspect wiper operation & top up windscreen washer reservoir	X	X	
	Renew alarm transmitter batteries (check with customer)	<del>† ``</del>		1 yr

# **Section OI**

Road Test Performance	e	
Engine performance		Tailpipe CO
		• •
Clutch operation		Gearbox operation
Brake performance		Steering performance
Driveline & suspension r	noise/vibration	Wheel balance
Additional Work Perfor	·	
Work completed by	Owner's Mainte	enance Booklet stamped:
Recommended Service	e Times	Dealer Stamp:
Regular Service:       2.8         Op. 2a:       0.6         Op.5:       0.7         Op.7:       0.6         Op.8:       0.5         Op.14:       0.6	9 hr 8 hr 6 hr 7 hr 6 hr 5 hr 6 hr	Date:
Op.19: 0.6	6 hr 1 hr	



# **PRE-DELIVERY INSPECTION**

**ELISE/EXIGE** 

LSL345C



MODEL		COLOUR		VIN	SCC	
OPERATION DESCRIPTION .						<b>√</b>
Fit protec	ctive covers to se	ats, footwells	& steering wheel			
Engine						
	ngine & transmiss	ion oil levels				
	oolant fill level.					
Start En	gine					
	ngine & transmiss	ion for oil lea	ıks.			
	ooling system for					
Check er	ntire fuel system f	for leaks.				
Use Lotu	s Scan tool to ch	eck stored co	des.	· · · · · · · · · · · · · · · · · · ·		
Wheels	& Tyres					
Check co	old tyre pressures					
Check to	rque of wheel bol	ts.	<del></del>			
Check ty	reweld canister is	fitted to veh	icle.			
Electrica	ıl .					
Check se	curity of battery t	erminals.				
Check of	peration of alarm	system & CD	L.			
Check or	peration of all exte	erior & interio	r lamps.			
Check or	peration of horn &	hazard swite	ch.			
	per operation at a					
<u> </u>	asher operation, j		& reservoir level.			
	eration of all inst					
			ning & blower fan.			
Check or	peration of audio	equipment &	set time clock (if a	applicable	e).	
Body						100
Check br	ake / clutch fluid	level.				
	eration of doors					
	peration of electric		mechanism.			
	of hard & soft top					
	peration of seatbe					
	terior trim for dan					
Check all paint work for damage (Fill in attached paint damage sheet as necessary).						
Check presence of toolkit & literature pack.  Fit number plates and tax disc holder.						
	-					
	e Warranty Liter					
			udio booklet & oth		mentation.	
Complete pages 2, 3, 4a & 4c in "Maintenance Record" booklet.						
Cut out pages 4a & 4c for return to Lotus Cars Warranty Department.  Copy alarm installation certificate, PIN & key details (including locking wheel nuts). Supply originals to						
	m installation cei			uding loc	king wheel nuts). Supply origi	inals to
Fill in AA	card (Enter vehic	le registratio	n no. & expiry dat	e (1 year	from reg. date)) & replace in	pack.

Road Test Performance Check - Add comments as n	ecessary
Check engine performance.	·
Check brake performance.	
Check clutch operation.	
Check gearbox operation.	
Check steering performance.	
Check wheel balance.	
Driveline/suspension noise/vibration.	
General Comments	
Additional Work Required	
Additional Work Completed by:	
Valet	The state of the s
Undertake complete vehicle valet.	
Notes - The PDI is subject to the following conditions:	Dealer stamp:
a) It is the responsibility of the supplying dealer to ensure	that
the car is delivered to the customer in the best possible	
ndition.	
b) All posts increased during the increase.	
b) All costs incurred during the inspection process are the ponsibility of the dealer.	res-
portolating of the dedict.	
c) Failure to return a signed copy of this inspection to Lotu	
Cars Ltd. by the dealer, may result in warranty claims o	n
the particular car being rejected.	
Pre-Delivery Inspection Completed by:	

ONCE COMPLETED SEND ORIGINAL COPY OF PDI FORM & MAINTENANCE RECORD PAGES "P.D.I & REGISTRATION OF SALE" TO LOTUS WARRANTY DEPARTMENT:

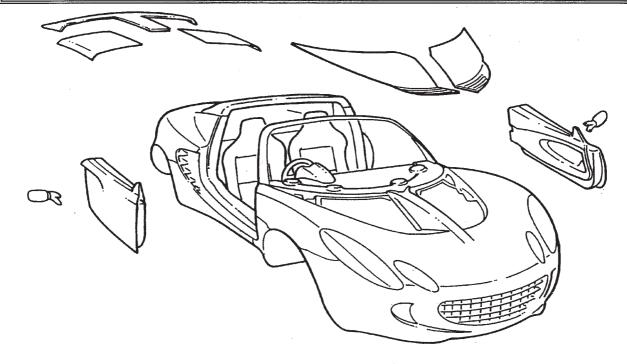
WARRANTY DEPARTMENT, LOTUS CARS LTD. POTASH LANE, HETHEL, NORFOLK, NR14 8EZ, ENGLAND

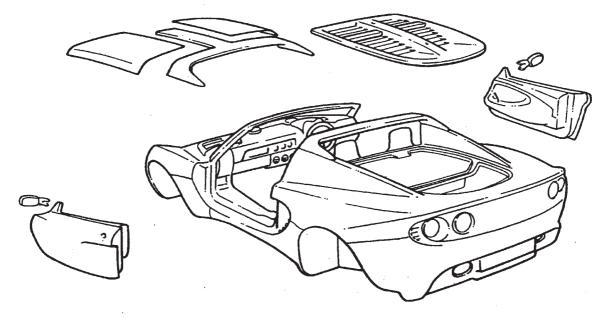
Date:



# PRE-DELIVERY PAINT MARK UP







VIN	
COLOUR	
OWNER	
DATE OF PDI	

	PAINT DEF	EC.	TCODE
В	BLISTERING	N	SHADING
С	CHIPS	0	OVERSPRAY
D	DISTORTION	Р	PRE-RELEASES
F	FLAKING	R	RUN
G	GEL CRAZING	s	SCRATCHES
Н	PIN HOLES	Т	THIN PAINT
K	SINKAGE	U	DIRT UNDER PAINT
М	MAT CREASES	V	VOIDS